Figure 1
Example Reliability Measures of High Screening Criteria
22% Hits, 78% No-Hits
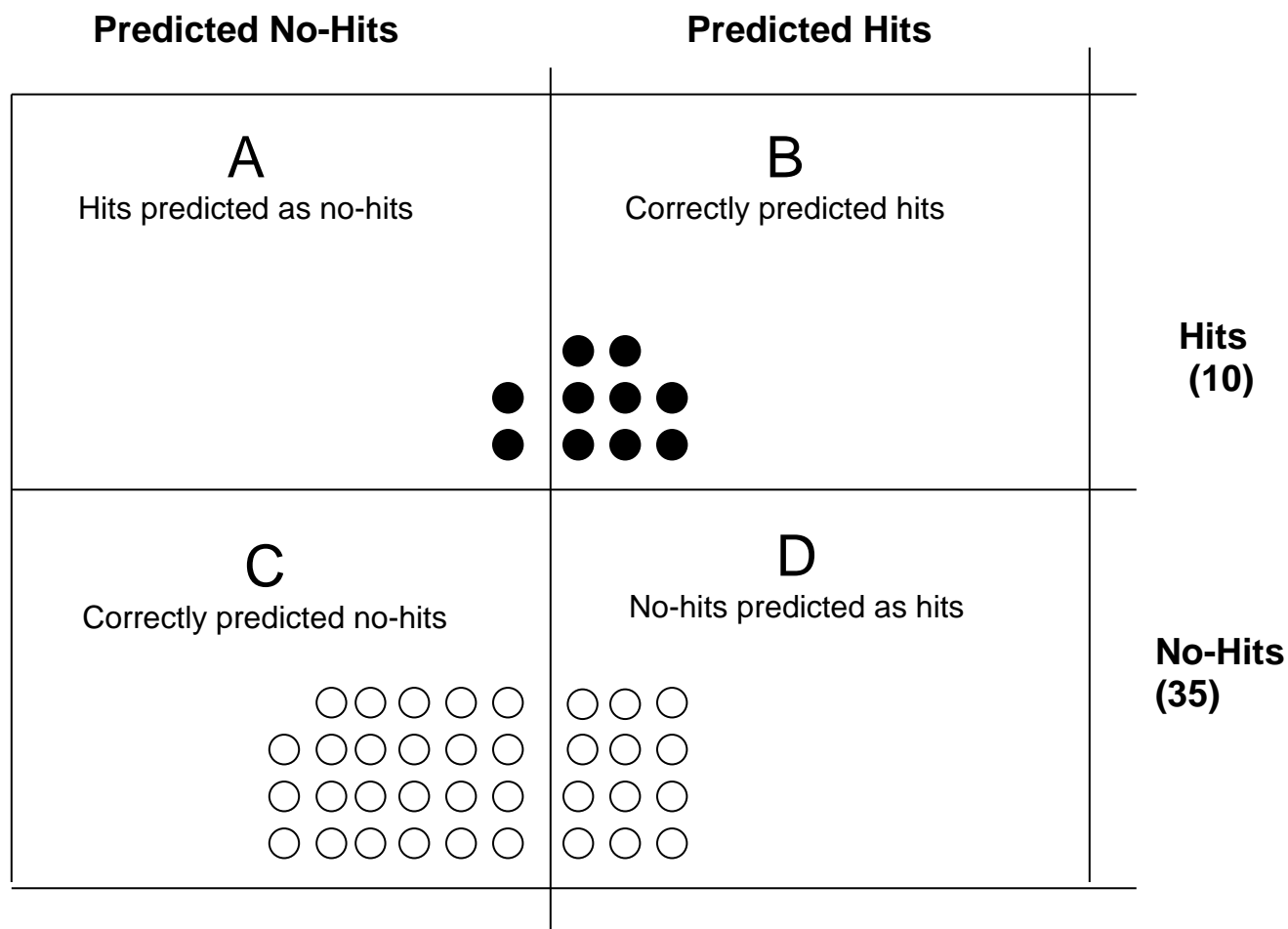
Predicted No-Hits   **Predicted Hits**

A
Hits predicted as no-hits

B
Correctly predicted hits

Hits (10)

C
Correctly predicted no-hits

D
No-hits predicted as hits

No-Hits (35)

● Adverse effects observed (hit)

○ No adverse effects observed (no-hit)
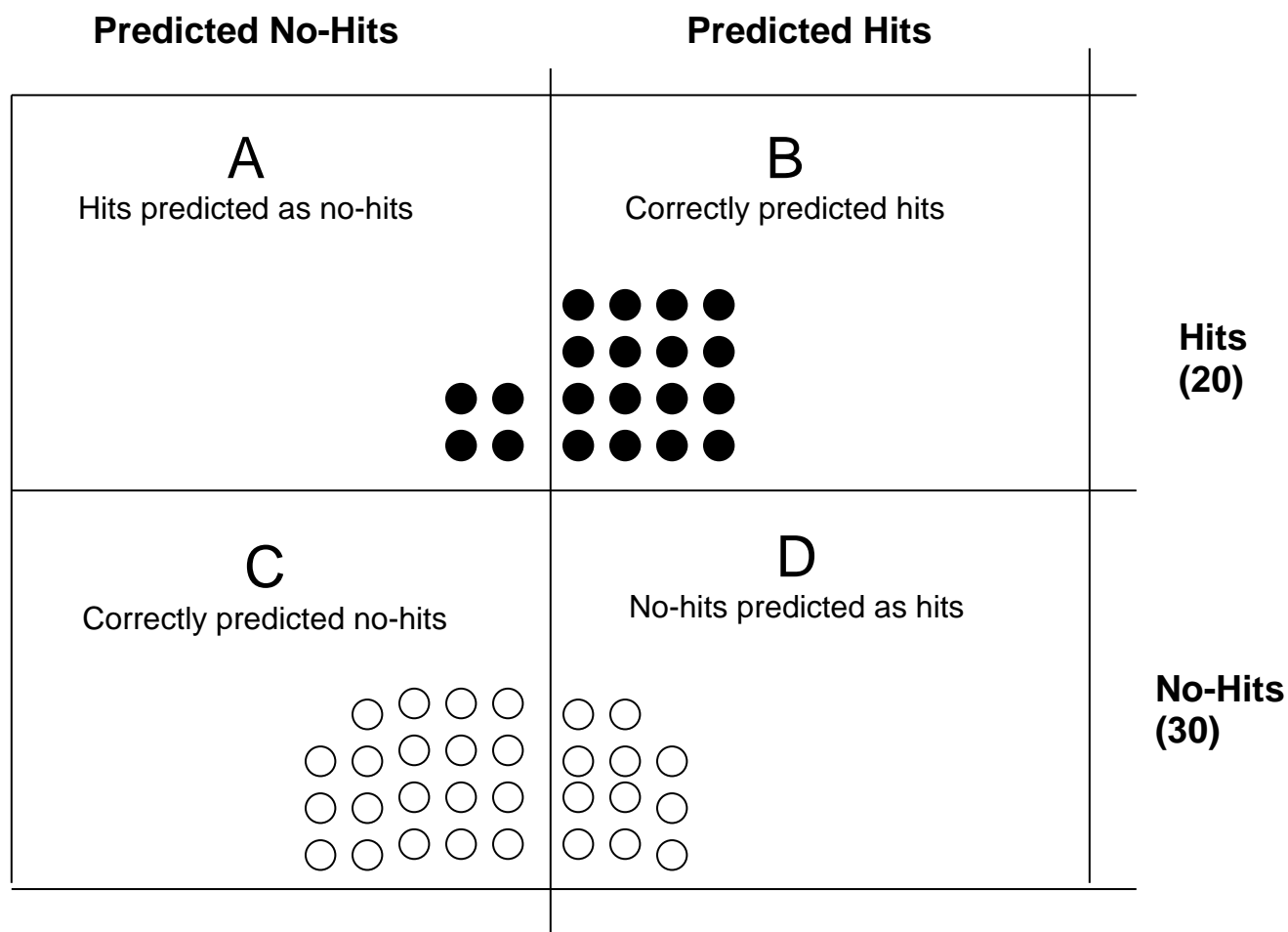
False Negatives = A / (A + B) = 0.20   Predicted-Hit Reliability = B / (B + D) = 0.40

False Positives = D / (C + D) = 0.35   Predicted-No-Hit Reliability = C / (A + C) = 0.92

Figure 2
Revised Reliability Measures of Screening Criteria
40% Hits, 60% No-Hits

Predicted No-Hits   **Predicted Hits**

A	B
Hits predicted as no-hits	Correctly predicted hits

Hits (20)

C	D
Correctly predicted no-hits	No-hits predicted as hits

No-Hits (30)

● Adverse effects observed (hit)

○ No adverse effects observed (no-hit)

False Negatives = A / (A + B) = 0.20   Predicted-Hit Reliability = B / (B + D) = 0.62

False Positives = D / (C + D) = 0.35   Predicted-No-Hit Reliability = C / (A + C) = 0.83